GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:2344
ANSWERED ON:03.12.2007
TOXIC RICE
Chowdhury Shri Adhir Ranjan;Nikhil Kumar Shri

Will the Minister of AGRICULTURE be pleased to state:

(a) whether rice grown in West Bengal and in some other parts of the country has high proportion of toxic arsenic as reported in the Hindustan Times dated October 31, 2007;

(b) if so, the details thereof;

(c) whether the researchers from UK have recently conducted research in West Bengal and found poisonous chemicals in paddy fields; and

(d) if so, the details thereof alongwith the steps taken by the Government to protect agriculture from such poisonous chemicals?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA)

(a) & (b) : Rice grown in the arsenic contaminated areas of West Bengal, particularly in Haringhata, Chakdah blocks of Nadia district and Deganga block of the district of 24 parganas (North) has shown accumulation of arsenic in rice mentioned as under:

Arsenic content (mg kg-1)

	Rice dry matter	Rice grain
Pre-kharif rice	5.90 - 18.82	1.98 - 3.52
Boro rice	11.6 - 23.8	1.84 - 10.0

However, the risk of arsenic toxicity through rice is limited as much of the arsenic taken up by rice plant is accumulated in the hull, and aleuron layer and most of it, is lost while milling, polishing and after cooking rice.

(c) & (d) : The UK group of researchers led by Professor Andrew Meharg, has concentrated their study in Bangladesh and found significant build-up of arsenic in Bangladesh soils through administration of arsenic contaminated groundwater in irrigation.

The Indian Council of Agricultural Research has initiated a network project entitled `Arsenic in food chain: cause, effect and mitigation.` to deal with arsenic entry in food-chain through food, feed, fodder, livestock, fish, milk etc. and the effects in human physiology thereof, along with exploring possible mitigation options under the National Agricultural Innovation Project involving various centres including Bidhan Chandra Krishi Viswavidyalaya, West Bengal. The arsenic toxicity is also being addressed through State Arsenic Task Force, Public Health Engineering Directorate and others.